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ABSTRACT

This paper presents panelists' responses to key questions on learning diversity at the 13th Annual Foundations Symposium and Open Forum. The panelists included five professors and one doctoral student in educational technology; each one responding to one of the following questions: (1) why address diversity, why the field should listen, what the benefits are, and for whom; (2) why cultural diversity has not been a part of educational technology discourse; (3) mechanisms for utilizing existing frameworks for incorporating cultural pluralism into instruction; (4) the impact gender has on the design of instruction; (5) the need for cultural diversity to be explicitly addressed within current instructional design models; and (6) personal experiences evaluating culturally insensitive materials. (Author/AEF)

Title:

Responding to Cultural Diversity

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This paper reflects the contributions of five professors and one doctoral student of Educational Technology, who serve as panelists for the 13th Annual Foundations Symposium and Open Forum. This year's theme is *Responding to Cultural Diversity,* and continues the tradition of presenting topics and issues that are of current relevance to the field, and are foundational in nature. The issue at hand — the impact of learner diversity on the practice of Educational Technology — is one which extends the current boundaries of the field and fosters dialog between and among the presenters and audience.

Both this manuscript and open forum extend the present knowledge base in the field by addressing key critical issues regarding learner diversity. The body of this document is presented in six parts: 1) Powell begins by asking why address diversity, why should the field listen, what the benefits are, and for whom; 2) DeVaney questions why culture has not been a part of the Educational Technology discourse; 3) Branch examines mechanisms for utilizing existing frameworks for incorporating cultural pluralism into instruction; 4) Knupfer reveals the impact gender has on the design of instruction; 5) Thompson asserts that cultural diversity must be explicitly addressed within current ID models; and 6) Reeves reflects on personal experiences evaluating culturally insensitive materials.

(1) Responding to Cultural Diversity: Who, Why, and For What?

Gary C. Powell, Ed.D.

Why address diversity? The rhetoric of educational technology (as depicted in design models and development guides) is very clear that learner characteristics such as prior knowledge, entry behaviors, ability and motivation must be taken into consideration to increase student learning. Teachers and designers both are urged to recognize those psychological characteristics that set one student off from another. Instruction is more effective when it is fitted to a learner's uniqueness as a person. Such matters as mental abilities, aptitudes, and motivations are thus regarded as individual endowments worthy of respect and available for use in the learning process. Matters of cultural, racial and ethnic diversity, however, have not elicited similar treatments in the educational technology literature, including our texts, journals, and conference presentations. No longer can instructional technology ignore the critical challenges to educating diverse students. Preparing learners to function in an ever-changing international marketplace requires paradigmatic shifts in the art and science of educational technology.

Why should I listen? There is strong support, particularly from researchers and practitioners in other fields of Education, that learners' perceptions of the educational process depends largely on the values, attitudes, and behaviors of those within their cultural group. All learners therefore bring culturally based rules, expectations, value systems, and needs about education to the learning environment. Increasing our ability to understand them, respond to them, and accommodate for them within the current Instructional Systems Design framework, takes us one step closer to education which is meaningful, relevant and effective for all. 'All' includes persons who may not look or sound like us, and who's preferred learning and teaching styles may not be the same as ours either. It is critical that we as educators value these alternative styles, and see them as viable and valid assets to instruction. We should not imposing practices, orientations or expectations which reflect our own (often mainstream) culture on others.

How shall I benefit by responding to diversity? Good question! Perhaps a better question should be how shall my *learning audience* benefit, because your benefit (what's in it for me) will stem from that of the learners. In other words, as designers, we experience satisfaction when we accurately and consistently meet the psychological and motivational needs of the populations for whom we design instruction. We faithfully follow our models, and focus on individual characteristics (entry behaviors) such as motivation, age, achievement level, cognitive style and reading level. The end result (at times) is 'effective' instruction; at which point we are happy. While important to address, such traditional individual characteristics miss other salient forms of diversity, especially cultural. The cultural background of the learner must be determined and explicitly addressed. Basic learner analysis and user-centered designs are not enough, because like it or not, designers' instructional 'creations' are shaped by their own culturally influenced values, norms, beliefs and morals.

How will you benefit by responding to diversity? First, by recognizing that you now have adequately analyzed your learning audience (which in all contexts grows more diverse each day). And second, from the satisfaction of successfully incorporating a culturally pluralistic focus into the design of instruction, such that it capitalizes on learners' distinctive learning styles, strengths and orientations.

Who am I?! You are an instructional technologist, instructional designer, needs assessment expert, evaluation expert, media specialist, curriculum specialist, teacher, administrator, professor, HRD expert, training manager or trainer who wishes to deliver instruction which is responsive to the needs of diverse learners.

(2) Negligent Discourse

Ann DeVaney, Ph.D.

As the field of educational technology emerged from the audiovisual area, scholars and practitioners yearned for a neutral discourse that would bring rigor and respect to the field. Informed by behavioral theory and systems models, a dominant discourse did coalesce (DeVaney and Butler, 1996). It claimed to be culture free and no communications about race and gender appeared for decades. Can these conversations now take place?

A discourse is an informal system of thought that is apparent in the rhetoric of scholarship, speech and pedagogy within a discipline. You can't pin it down and dissect it, but it is there and its material effects are felt (Bove, 1992). Some people believe that the Oklahoma City bombing was the material effect of the rhetoric of a specific discourse. The morning after the Iowa caucuses, Bob Dole adopted the rhetoric of a specific form of populism that had garnered many votes for Pat Buchanan. The material effects of a discourse that excludes talk about race may be fewer jobs for people of color in the field that espouses the discourse.

Although many discourses inform scholarship in educational technology, there has always been a dominant one, a sanctioned discourse that forms official knowledge in the field. (Apple, 82) Whether it was audiovisual research in the 20s, 30s, or 40s; or instructional technology in the 50s, or 60s; or instructional systems technology in the 70s and 80s, a hallmark of the official knowledge was its valorization of psychology, the study of the brain, a unit of one. Whether connectionism, operant conditioning, information processing or schema theory, educational technology scholars used models of brain functions to describe the relation 'ip between machines and learning, or software design and learning. The field appeared inextricably linked to the fielo of educational psychology, so much so that it was hard for practitioners to conceive of learning in terms more expansive then the explanation offered by a unit of one. (DeVaney and Butler, 1996) From Immanuel Kant to the philosophers of the Vienna Circle, the concept of the mind and brain has been boxed and delivered to educators in the rhetoric of mathematics and physics (Rundell, 1996).

Not to belabor the point, but we have suffered under the tyranny of psychology. The discourse used to describe human learning was devoid of concepts of culture, yet we all recognize that we only learn some things because of our membership in a group. We recognize that meanings are negotiated. The frequent iteration of certain concepts, theories, definitions, assumptions and values has created a psychological discourse that shackled our thinking about learning; that shackled our epistemologies.

Some postmodern discourses break the shackles of reductive psychological notions (Derrida, 70, 76, 78; Foucault, 79; Rorty, 82, 91). Yet of all the 80s and 90s scholarship in schools of education, why is ours the last to consider issues of culture, issues of race, gender and ethnicity. Rather than answer that question directly, I'd like to say that the time is here for discussion of educational technology and cultural pluralism. And, I'd like to ask you to listen and try to identify what discourses inform the messages of our speakers today on cultural pluralism.

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(3) Utilizing Existing Frameworks for Incorporating Cultural Pluralism into Instruction

Robert Maribe Branch, Ed.D.

Instructional technologists have tools available to respond to the current demand for planning instruction which is culturally sensitive. The domains of instructional technology (Seels & Richey, 1994) offer a conceptual framework for understanding the relationship between research, theory and practice of inclusive educational communications. Systematic designs of instruction (Andrews & Goodson, 1980; Edmonds, Branch & Mukherjee, 1994) provide procedural frameworks for identifying opportunities to assure an appropriate match between abilities, values and perceptions of the intended learner audience, and negotiated learner outcomes. The common events associated with an instructional episode (Gagné, Briggs & Wager, 1992) suggests a pedagogical framework for accomplishing exchanges where learners deconstruct and construct knowledge through cultural perspective. The purpose here is to recommend ways in which instructional designers can routinely incorporate cultural pluralism into episodes of instruction.

Pluralism, rather than diversity, is the term of choice because cultural diversity exists within any learner audience regardless of whether or not the quality or quantity of the diversity is acknowledged by the instructional designer. Cultural pluralism requires action in order to realize any learner potential. Therefore, diversity is merely a recognition state, which is passive; while pluralism is an active state requiring purposeful activities designed to elicit the uniqueness of the individuals that form the group. Thus, diversity of the learner audience emerges as positive attributes upon which an instructional episode can be constructed.

The domains of instructional technology: *design, development, evaluation, management* and *diffusion* (Seels & Richey, 1994), conceive categorical notions about how to research, theorize and practice instruction. Each domain also offers an opportunity to incorporate culture as part of an educational communication. *Design* offers the opportunity to scrutinize the origin of content and other knowledge structures in order to determine the validity and meaningfulness of what is to be taught. *Development* offers opportunities to study the impact inclusive ideas will have on an ability to deliver those ideas. *Evaluation* offers opportunities to explicitly assess the value of instructional content relative to the values of the learner audience. *Management* offers opportunities to insure issues of equity and access are addressed among organizations and institutions associated with education, training and the development of human resources. *Diffusion* of innovations offer opportunities to extend ideas about the value of diversity and pluralism beyond surface levels to deep levels so that incorporating cultural pluralism becomes a way of life. While the domains of instructional technology conceptualize opportunities for culturally pluralistic instruction, the systematic design of instruction provides procedures for realizing the research, theory and practice conceived among the domains.

Instructional design that is systemic, systematic, based on general systems theory, and adopts an input-process-output paradigm provides procedures for incorporating cultural pluralism into instruction. The components of a systems approach model: *determine instructional goal, analyze the instructional goal, analyze learners and contexts, write performance objectives, develop assessment instruments, develop instructional strategy, develop and select instruction, design and conduct the formative evaluation of instruction, revise instruction* and *conduct summative evaluation* (Dick & Carey, 1996), can independently facilitate ways to assure instructional designers that cultural aspects are consistently incorporated into any instruction.

Determine instructional goal provides a procedure where learner expectations can originate from analyses of people already doing a job and are similar in cultural background as members of the learner audience. *Analyze the instructional goal* provides a procedure where a diagram is generated that illustrates the diverse skills and knowledge required for a learner to achieve a goal. *Analyze learners and contexts* provides a procedure where individual learners and grouped learner audiences can be understood in terms of their preferences, skills and attitudes that are culturally influenced. *Write performance objectives* provides a procedure where specific expectations of the learner can be matched directly with the cultural values and learning styles of the learner. *Develop instructional strategy* provides a procedure where each event of an instructional episode can correlate with activities relevant to out-of-school experiences of the learner audience which support knowledge construction and skill acquisition. *Develop and select instruction* provides a procedure where instructional media is utilized to portray images and discourse similar to the learner audience. *Design and conduct the formative evaluation of instruction* provides a procedure where members of the intended audience directly inform the instructional improvement process by adding his or her own perspective about any planned instructional episodes. *Revise instruction* provides a procedure where each person can add data, information, knowledge and wisdom to the planned instruction based on personal cultural perspectives. *Conduct summative evaluation* provides a procedure where the value and worth of any instruction can be subjected to the critical judgment of all stakeholders in terms of cultural sensitivity. While instructional design provides a framework of procedures for incorporating cultural pluralism into

instruction, the sequence of events which actually form the instructional episode depend upon a pedagogical framework that supports categorical inclusions of cultural perspectives.

Instructional episodes established to promote action-based, interactive and purposeful exchanges enhance the potential for learning content and culture. The nine events of instruction: *gaining attention, informing learner of the objective, stimulating recall of prerequisite learning, presenting the stimulus material, providing learner guidance, eliciting learner performance, providing informative feedback, assessing performance,* and *enhancing retention and transfer* (Gagné, Briggs & Wager, 1992) have the potential to promote knowledge exchanges from cultural perspectives.

Gaining attention can be accomplished by displaying images or objects a learner is likely to encounter in a normal day; and which relate directly to content of the instructional episode. *Informing learner of the objectives* can be accomplished by avoiding jargon and using language common to the learner audience without degenerating to slang, profanity or colloquialism which may detract from the attainment of new vocabulary. *Stimulating recall of prerequisite learning* can be accomplished by asking learners what is important about the intended outcomes of a planned instructional episode. *Presenting the stimulus material* can be accomplished by asking learners to identify ideas, thoughts and perspectives that are similar and different from their own perspective. *Providing learner guidance* can be accomplished by utilizing examples and artifacts familiar to the learner. *Eliciting learner performance* can be accomplished by encouraging learning within a familiar cultural context or within a cultural context which one desires to become familiar. *Providing informative feedback* can be accomplished by comparing and contrasting learner perceptions of the content with the perceptions of content specialists who share common cultural interest with the learner. *Assessing performance* can be accomplished by encouraging the learner to compare his or her performance with the expected performance, and propose changes that can be compared to teacher recommendations. *Enhancing retention and transfer* can be accomplished by varying the cultural context where a particular knowledge or skill can be demonstrated consistent with measures of success identified in the criteria of the stated objective(s). While the sequence of events which form an instructional episode suggests a pedagogical framework where cultural pluralism can be accomplished, there is no substitute for the personal commitment required to plan and successfully implement cultural pluralism into instruction.

A learner-centered perspective as a philosophical orientation to instructional technology is essential in order to incorporate cultural pluralism into instruction. Further, there are four requisites for promoting cultural pluralism:

- Facilitating learner achievement is the fundamental purpose.
- Teachers of any subject can promote cultural pluralism.
- There are invisible privileges inherent in the classroom.
- Cultural pluralism can be effectively incorporated into instruction when planning to teach.

The main caveat for people sincerely interested in instructional technology frameworks that support cultural pluralism is not to make assumptions about individual values based on group norms. Figure 1 highlights a relation between cultural and individual differences.

Six considerations are recommended prior to attempting to incorporate cultural pluralism into instruction:

- Understand your own perceptions.
- Offer positive perspectives.
- Prepare sufficiently.
- Set rules of respect.
- Begin with non-threatening issues.
- Optimize the teachable moment. (Branch, Goodwin & Gualtieri, 1993)

The development of new conceptual tools and procedures for responding to needs for creating culturally sensitive instruction is important, however, in the meantime, instructional technologists should consider utilizing existing frameworks for incorporating cultural pluralism into instruction.

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(4) Gendered by Design: Reflections on a Social Construct with Deep Historical Roots

Nancy Nelson Knupfer, Ph.D.

To the casual observer an initial survey of instructional design theory and practice might not reveal any obvious pattern in relation to gender. Instructional designers historically have taken the "one size fits all" approach and until recent years have been called to task on this only mildly. Yet a close examination of instructional design and gender, reveals a clear, consistent, and pervasive relationship that has deep historical roots, and that winds throughout our daily lives and perpetuates itself through its interweavings with society.

These roots continue to support instructional design in its historical sense by constantly feeding the old system while all but strangling attempts to pay serious attention to gender equity (McCormick, 1994; Gornick & Moran, 1972). Materials developed for use in public, private, and military schools as well as instructional messages delivered to the public through advertising, television, and public service messages continue to portray women and men in stereotypical ways. Despite attempts to correct this situation over many years, a recent study of computer clip-art images reveals that the stereotypes have invaded the desktop computing environment, with images of men depicted in leadership and authority roles, while women are depicted in subordinate roles (Binns & Branch, 1995).

The complexities of this relationship are enormous, yet can be difficult to recognize, reveal, analyze, explain, and redirect. Like society itself the complexities reflect the dynamics of different situations in different ways, among different individuals. An examination of the complex relationship between instructional design and gender reveals inequities that result from a persistent pattern of practice. Recognizing the result of those inequities can be easier than finding the causes and correcting the problem at its root. Like a cancer, its result shows up at different stages and in different ways, among different individuals. If left untreated, it devastates the person. But recognizing the disease is much easier than finding a reliable cure.

Inequities that result from the practice of instructional design often go unrecognized because they emerge not just as a result of what has been done, but also as a result of what has been left undone. The neglect and omission of the female population reveal themselves in subtle ways on an individual basis, but as a collective result appear throughout society as something that begins in the home, and perpetuates itself through schooling and employment practices. If that was not the case, then there would be no need for recent efforts to attract girls into the study of math and science (Kable & Meece, 1994) and the number of distressing stories about females succeeding despite the myriad of obstacles (Aisenberg & Harrington, 1988; Clark & Corcoran, 1986; Frenkel, 1990; Gornick, 1990) would no longer be told.

Although many scholars insist that great strides have been made concerning equity, they would be hard pressed to explain why it was necessary and yet took so many years to begin such a conversation among leaders in the field. Yet the first open conversation held at the Annual Meeting of Professors of Instructional Design and Technology concerning the need to attend to equitable treatment of females and people of differing cultural backgrounds was held among the delegates in May, 1995. Even sadder is the fact that at least two of the well-established men who seemed to make sense of and contributed positively to the group conversation, made extremely prejudicial statements following the conversation. This, I can only interpret as either unwillingness or inability to see beyond their current practices, beliefs, and biases. The real concern goes beyond the biases of two leaders, but to the larger dimension of the students they teach, the instructional designers and teachers they train.

The socially constructed meaning, expectations, and opportunities based on gender begin with differing expectations for people, depending upon their sex at birth (Stern & Karraker, 1989). The recent news media attention to the pathetic and heart-wrenching plight of unwanted baby girls who have been killed or dumped in orphanages (Chen, 1996; Human Rights Watch, 1996; Tyler, 1996) is not a value that is restricted to Chinese culture. It is a value the reflects itself in the daily lives and education of many people in many cultures. It reveals itself in the way we groom boys for leadership positions while we teach girls to be submissive, in the way we emphasize the importance of male-dominated sports, in the way teachers respond to boys differently than to girls (Olivares & Rosenthal, 1992), in the way

stereotypes are perpetuated in the media (Kilbourne, 1990; Schwartz & Markham, 1985), and in the way we recruit for jobs (Bem & Bern, 1973; Fidell, 1975; Rowe, 1990). It reveals itself in the way we provide examples, exercises, and meaningful educational opportunities that boys can often relate to better than girls. It reveals itself in the grooming of boys for entire categories of jobs involving science, math, medicine, and politics. For example, can you explain how a girl would know that national television advertisements about hotline counseling at "Boystown" possibly could be meant to serve girls as well as boys? Never a mention of this is made. Or perhaps you could explain why there is a dearth of girls applying to attend "Boys State" during special summer sessions at college campuses. Does our society really wish to imply that gender is so very important in shaping future political leaders that the very name of a program must discourage girls from attending?

Girls can achieve equally well in the aforementioned areas but have not been encouraged to do so until recently. And now the attempts are filled with remaining hurtles and barriers that must be overcome (Top, 1991). Meaningful instructional design practice must do more to attend to these matters and take an active role in encouraging girls (Van Nostrand, 1991). While not enough has been done and it is too late for many, instructional designers can begin to make amends for those girls who have yet to come through our nation's school systems and workforce training programs. Instructional designers can make a better effort to provide experiences that girls can relate to, offering instructional opportunities that are not gender biased, and encouraging teachers to actively attend to issues of gender equity (Turkle & Papert 1990).

Instructional designers can influence the entertainment industry, home market, school environment, and practices in business and military environments. Designers can accept the importance of their role in shaping the self concept and encouraging equitable access to job skills that later translate into life skills and wages commensurate with experience. A more positive and forward-thinking outlook on the role of females in our society can certainly do much to influence the drive and effort that is currently necessary for females to overcome the many obstacles in daily life.

Instructional designers can influence educational practice by designing instructional environments that attend to the needs of the female population as well as those of males. They can encourage reflective practice that makes adjustments to the needs at hand. The information age brings the challenge of shifting responsibilities. Even through the majority of network users are males (Shade, 1993), females must be encouraged to learn skills and be provided with opportunities to have equal access to information.

Until society gets beyond viewing women as second class citizens in stereotypical roles, then instructional designers will have a difficult job in educating the public. Yet it can be done. The first step is to educate instructional designers to attend to the needs of a pluralistic society. The second step is to encourage business, industry, government, and education institutions to include knowledgeable designers on their project development teams. The designers can produce text-based and mediated materials that attend to the needs of females as well as males. Further, they can provide better training for teachers and others who provide information to the masses.

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(5) The Need for Explicit Instructional Design Paradigms

Wendy Thompson

Instructional design responds to the complexities of instruction in numerous, unique ways. Though the goal of each domain of instructional design is to maximize the instructional intervention, however, paradigms that conceptualize learner-centered instruction have yet to address culture and its importance in the instructional process.

Education is a social system. Like other social systems, it mirrors attitudinal change over time. Qualitative research's challenge to the preeminence of quantitative research in academic literature (see Bogdan & Biklen, 1992) and the shift from chalkboards to computers in the classroom illustrate this assertion.

America, once perceived as "The Great Melting Pot," preached Americanization by assimilation. The attempt was made to strip away or minimize ethnicity; an amalgam of people was to make one America. The relatively new immigration and a surge in cultural pride, however, challenged America's historical assimilationist paradigm, fostering the perception of this country as a mosaic. Each tile with its own shape, size, and color made a contribution to the beauty of the overall picture. This, according to Scheel and Branch (1993) constitutes cultural pluralism, a concept which "reflects the recognition that cultures have no inherent hierarchy of truthfulness; that is, patterns of behavior and thinking yield a multiplicity of perceptions of the world which are no more or less verifiable than others" (p.7). Cultural pluralism may be seen as the ultimate goal evolving from a diverse population.

While the country – and the world for that matter – had undergone a major paradigmatic shift on a macro social level, a shift of this magnitude had yet to take place on a micro level within education, a field which has been traditionally assimilationist. The culture of those involved in the educational process was not a determinant factor, because the primary goal of education was the mainstreaming of all groups. The assimilationist educator, then, may have advocated English as a second language instruction not for the enrichment of the students, but as a quick-fix to get immigrants to become literate English speakers (Janzen, 1994). The acceptance of the tenets of instructional design over the years has gradually minimized instances of outmoded, teacher-centered instruction.

While instructional design itself is being accepted more readily, educators appear to be reticent in incorporating the cultural renaissance into instructional planning. Instructional design paradigms remain stagnant in the face of sweeping cultural reform. The culture of all participants within the instructional intervention should be made more explicit. Models are needed to reflect culture's presence.

Presently, educational technologists are functioning on a type of honor system. One is left to assume that cultural elements are included in instruction. Banks' Four Levels of Implementation (1989) describes the depth of inclusion of culture in curricula. Level I, Contributions, acknowledges non-mainstream contributions, highlighting individually distinct elements, such as heroes, holidays, and foods. Level II, Additive, allows for the insertion of content, themes, and perspectives of cultural groups into the curriculum; basic curricular structure remains unchanged. At Level III, Transformation, structural changes to the curriculum allow for the inclusion of concepts, issues, and events viewed from the perspective of the cultural group. Level IV, Social Action, appears to be the most self-actualized level of the paradigm. Students decide on social issues involving cultural groups and act constructively to solve them. Presently, most curricular inclusion of culture occurs at Level I. Quaint observations of holidays, sampling of different foods, and exhibitions of native dress suffice for the inclusion of culture in curricula. Instructional design models currently in use accommodate this implicit inclusion.

Instructional designers should be mindful of the position that learning occurs like Lego® blocks, building on itself to form new ideas. The more attractive the block, the greater the chance that it will be snapped from short term memory snugly into place in long term memory, to last ad infinitum. Chunking and the acceptability of messages increase exponentially the opportunities for these blocks to snap together and last, ensuring that learning has occurred (Gagné, Briggs, & Wager, 1992; Gredler, 1992). Common sense dictates that messages coming from a messenger that most resembles the learner would make the message more attractive and would hasten its adherence to the learner's schema. This principle is one of the basic foundations of culturally pluralistic instruction.

One may ask, "What's the solution, then, to including culture in instructional design?" Is in tweaking models such as Dick and Carey by merely adding another box? Is it in reshuffling and adding another event to Gagné's already existing nine? Or is it in totally discounting present instructional design models altogether? General system theory is one of the informants of instructional design (see Dick & Carey, 1996); basic systems theory states that entropy is inherent in all systems. Models of the past have nobly served their purpose in the systems for which they had been designed. However, those systems are breaking down, making way for a new culturally pluralistic world order. The time has come for new instructional design models that conceptualize and reflect this change. A new generation of instructional designers appears ready to rise to the challenge of their creation.

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(6) An Evaluator Considers the Cultural Sensitivity of Instructional Materials

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Is cultural sensitivity a serious issue in the design, dissemination, and evaluation of instructional programs and products for international markets? Some might argue that cultural sensitivity is just a passing "fad," a by-product of the

current attention to multiculturalism within North American and European academic institutions. I disagree. Sensitivity to cultural diversity and pluralism is a "meta-value" that should influence virtually every aspect of human activity, including instructional systems design.

The rationale for including cultural diversity as a critical factor in evaluating instructional programs and products goes to the heart of the challenge of making evaluation a legal and ethical process. Scriven (1993) describes ethical, legal, and ecological standards as "value absolutes" that must not be violated when evaluating the merit and value of programs and products. For example, practical criteria for evaluating computer-based training (CBT) may include costs, but an ethical absolute would be paramount if it was found that the CBT delivery system released cancer-causing emissions. Cultural sensitivity should be added to the list of value absolutes. Attention to issues involved in cultural and ethnic diversity are not "nice to have" criteria, but essential elements in the evaluation of education and training. The importance of this absolute is heightened in the 1990's as more and more commercial and academic institutions seek to market instructional systems around the globe.

Any instructional designers and evaluators who have worked internationally or with minority populations in their own countries can identify examples of instructional programs, products, or methods that are culturally insensitive. For instance, when I was in Taiwan several years ago, I met the president of a large electronics company who was interested in providing ESL (English as a Second Language) instruction for his employees and their children. This entrepreneur was convinced that computer-based instruction could play a significant role in this undertaking, but he was disgusted with the cultural bias of commercial ESL materials he had purchased from the USA and the UK. "These programs ignore the importance of the family in Chinese culture," he complained. As an illustration, he showed me a writing assignment from one program. Students were supposed to complete a paragraph that began: "Johnny is worried about going home today because his mother's boyfriend is coming to dinner for the first time. Johnny feels...." The insensitivity of this exercise to Chinese cultural norms needs little explanation.

Ironically, the designers of this ESL exercise may have been trying to be sensitive to learners who came from broken homes, consciously deciding to place Johnny in a dilemma which is not unfamiliar in some Western societies. While this exercise might have been appropriate for some cultures, marketing these materials to another culture without considering the appropriateness of this scenario in that other culture is an insensitive act.

Cultural sensitivity is often a subtle issue, and it is very naive of instructional designers and evaluators to imagine that they can detect cultural insensitivities on their own. While some checklists or rating scales may assist designers and evaluators in catching glaring examples of cultural insensitivity, the collaboration of representatives of each target culture is necessary to identify less obvious sources of cultural bias. Andrews (1994) provides numerous examples of the hidden nature of cultural bias within a South African context. For example, Andrews' paper includes a graphic of a boy kissing his mother from a computer-based language lesson. The picture had to be changed to that of a mother kissing a boy when a Zulu-speaking member of the development team indicated that it is inappropriate for a boy to kiss his mother in the Zulu culture. Andrews also points to the common use of heads and hands as icons in multimedia; these are seen as taboo images of severed body parts in some African cultures. Leh (1996) illustrates other examples of the cultural insensitivity of multimedia design factors from an Islamic perspective. For example, the common use of animals as metaphors for people in "edutainment" software for children can be highly insulting to Muslims, especially animals such as dogs, pigs, and rats.

Even core pedagogical values in one culture may be culturally insensitive in another. An "advanced" science education curriculum for primary children developed by the ministry of education in an Australian state stresses the asking of "Why?" questions. This same curriculum contradicted cultural traditions within some Aboriginal communities in which asking "Why?" to an elder such as a teacher is considered highly insolent. The solution may not be in eliminating "Why?" questions from the science curriculum, but extra attention to how innovative pedagogical strategies are introduced into minority cultures is required.

There is not room in this brief presentation to describe all the ways that evaluators and others can include cultural sensitivity as a meta-value in their evaluations of instructional materials. Further, we hardly know enough about this important issue to delineate all the ramifications of this process. In fact, this is an area in much need of creativity and research. At the same time, it is important to point out that cultural sensitivity is not just a matter of identifying and eliminating cultural bias. The culturally sensitive instructional designer and evaluator should be proactive by seeking opportunities to increase the cultural relevance of instructional materials and to build upon cultural diversity and pluralism. Our ultimate goal should not be designing culturally neutral instructional materials, but creating learning environments that are enriched by the unique values that are inherent in different cultures. This is much easier said than done, but it is one of the most important challenges faced by educational technologists as we approach the 21st Century.

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